

🔍 Title: **JP07057739A2: MANUFACTURE OF FUEL ELECTRODE FOR HIGH TEMPERATURE TYPE FUEL CELL**

🔍 Derwent Title: Fuel electrode prodn for high temp fuel cell - by laser fusion spraying metal on stabilised zircon A in inert gas ([Derwent Record](#))

🔍 Country: JP Japan
🔍 Kind: A (See also: [JP02810973B2](#))

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🔍 IPC Code: [H01M 4/88](#); [C23C 4/12](#); [H01M 4/86](#);

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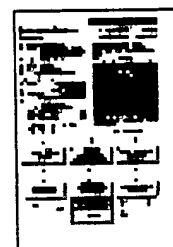
🔍 Abstract: PURPOSE: To provide a fuel electrode for high temperature type fuel cell by flame-spraying an electrode forming metal on the surface of a solid electrolyte consisting of stabilized zirconia in an inert gas atmosphere and whereby forming an electrode coat.

CONSTITUTION: A work 7 is held by a two-axis drive holder 9 and a flame spraying material 3 is flame-sprayed thereon by a focused lens beam 2, and a flame-sprayed film 8 is laminated by pulverizing a molten metal by a spray gas 4 in the form of a spray 6. The work 7 is fitted in a vacuum container 10 and N2 is injected therein at a specific vacuum degree, while N2 is ionized by an ion beam generator 12 and is applied on the work 7, to form a granular porous metal coat on a stabilized zirconia solid electrolyte. The surface on which a film is coated is provided as a fuel electrode agent. The film is thermally stabilized and has good adhesiveness with the electrolyte, while the film is not easily oxidated and is homogeneous.

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🔍 Other Abstract: CHEMABS 122(24)295357H CAN122(24)295357H DERABS C95-134378



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Fuel electrode prodn for high temp fuel cell - by laser fusion spraying metal on stabilised zircon A in inert gas

Patent Assignee: AGENCY OF IND SCI & TECHNOLOGY (AGEN)

Number of Countries: 001 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 7057739	A	19950303	JP 93216999	A	19930809	199518 B
JP 2810973	B2	19981015	JP 93216999	A	19930809	199846

Priority Applications (No Type Date): JP 93216999 A 19930809

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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JP 7057739	A	4		H01M-004/88	
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JP 2810973	B2	5		H01M-004/88	Previous Publ. patent JP 7057739
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Abstract (Basic): JP 7057739 A

Electrode forming metal is laser fusion sprayed on the surface of a solid state electrolyte made of stabilised zirconia in an inert gas atmos. to form an electrode covering film.

ADVANTAGE - Method produces homogeneous and thin porous metal covering film having improved and durable heat stability and adhesiveness.

Dwg.1/5

Title Terms: FUEL; ELECTRODE; PRODUCE; HIGH; TEMPERATURE; FUEL; CELL; LASER ; FUSE; SPRAY; METAL; STABILISED; ZIRCON; INERT; GAS

Derwent Class: L03; M13; X16

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